

Annual Report on Communications Markets in Illinois

Submitted to the Illinois General Assembly
Pursuant to Section 13-407 of the
Illinois Public Utilities Act



Illinois Commerce Commission

527 East Capitol Avenue
Springfield, Illinois 62701

www.icc.illinois.gov

September 2012



ILLINOIS COMMERCE COMMISSION

September 19, 2012

The Honorable Members of the Illinois General Assembly
State Capitol
Springfield, Illinois

Dear Members of the Illinois General Assembly:

Enclosed is the Illinois Commerce Commission's Report to the General Assembly entitled "Annual Report on Communications Markets in Illinois."

This report is submitted to the Illinois General Assembly in compliance with Section 13-407 of the Illinois Public Utilities Act.

Sincerely,

A handwritten signature in cursive script that reads "Doug Scott".

Doug Scott
Chairman

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EXECUTIVE SUMMARY

This report presents summary statistics on competition in local telephone services and the deployment of broadband services in Illinois. It is the eleventh such Report submitted to the Illinois General Assembly by the Illinois Commerce Commission pursuant to Section 13-407 of the Illinois PUA. The first such report was submitted to the General Assembly on October 23, 2002.

The statistics presented in this report are compiled from data reported to the Illinois Commerce Commission, the Federal Communications Commission, and various other governmental entities. The report provides a snapshot of competition in the areas of telephone and broadband services. The following are selected highlights from the facts and findings in this Report:

- 41 incumbent local exchange carriers (ILECs) and 76 competitive local exchange carriers (CLECs) reported providing wireline telephone service to Illinois customers as of December 31, 2011.
- CLECs, including fixed voice over Internet protocol (VoIP) providers, provided approximately 1.8 million (or 32%) of the roughly 5.6 million reported total Illinois wireline telephone lines in service at year-end 2011. The number of CLEC reported wireline telephone lines statewide changed little between year-end 2010 and year-end 2011.
- ILECs provided approximately 3.9 million (or 68%) of the roughly 5.6 million reported Illinois wireline telephone lines in service at year-end 2011. The number of ILEC reported wireline telephone lines decreased in Illinois from approximately 4.3 million at year-end 2010 to approximately 3.9 million at year-end 2011.
- The total number of reported wireline telephone lines in Illinois decreased by approximately 3.4 million lines (or 38%) between year-end 2001 and year-end 2011.
- Based on estimates derived from residential E-911 listings, approximately 224,000 residential competitive provider lines were provided by providers that currently do not report line counts to the Commission. If these lines are added to the reported CLEC wireline telephone counts, then CLECs provided approximately 2.0 million (or 34%) of the roughly 5.9 million estimated Illinois wireline telephone lines.
- Mobile-wireless subscribership continues to grow. The number of wireless subscribers in Illinois as of June 2011 (approximately 12.3 million) exceeds not only wireline subscribers reported for year-end 2011, but reported wireline subscribers for all periods since the Commission began producing reports pursuant to Section 13-407.

- Data collected by the Centers for Disease Control (CDC) indicate that in 2011 approximately 32.3% of the adult population in Illinois lived in households with only wireless service. In conjunction with the estimated percentage of wireline telephone lines provided by wireline CLECs (both reported and estimated unreported lines) and the percentage of households with no phone service available, the CDC figures suggest that approximately 39% of Illinois residential customers received wireline service from an ILEC in 2011 and that approximately 61% of Illinois residential customers did not take wireline service from an ILEC.
- Illinois providers served nearly 8.6 million Illinois broadband customers as of June 30, 2011.

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LIST OF ACRONYMS

ADSL – Asymmetric Digital Subscriber Line
ARRA – American Recovery and Reinvestment Act
BOC – Bell Operating Company
BTOP – Broadband Technologies Opportunities Program
CDC – Centers for Disease Control
CLEC – Competitive Local Exchange Carrier
DSL –Digital Subscriber Line
DSLAM – Digital Subscriber Line Access Multiplexer
E-911 – Enhanced 911
FTTC – Fiber to the Curb
FTTH – Fiber to the Home
FTTT – Fiber to the Tower
Gbps – Gigabits per Second
HFC – Hybrid Fiber-Coaxial
ICN – Illinois Century Network
ILEC – Incumbent Local Exchange Carrier
ISP – Internet Service Provider
FCC – Federal Communications Commission
Kbps – Kilobits per Second
LATA – Local Access and Transport Area
LEC – Local Exchange Carrier
LERG – Local Exchange Routing Guide
Mbps – Megabits per Second
NTIA -- National Telecommunications and Information Administration
PCI – Partnership for a Connected Illinois
PSTN -- Public Switched Telephone Network
PUA – Public Utilities Act
RUS – Rural Utility Service
UNE – Unbundled Network Element
UNE-L – Unbundled Network Element – Loop
UNE-P – Unbundled Network Element – Platform
VGE – Voice Grade Equivalent
VoIP – Voice over Internet Protocol
WiMax -- Worldwide Interoperability for Microwave Access

I. INTRODUCTION

Section 13-407 of the Illinois Public Utilities Act (PUA) requires that the Illinois Commerce Commission (Commission) monitor and analyze the status of competition in Illinois telecommunications markets, and to annually report its findings concerning telecommunications competition to the Illinois General Assembly:

The Commission shall monitor and analyze patterns of entry and exit and changes in patterns of entry and exit for each relevant market for telecommunications services, including emerging high speed telecommunications markets and broadband services. The Commission shall include its findings together with appropriate recommendations for legislative action in its annual report to the General Assembly. (220 ILCS 5/13-407)

PUA Section 13-407 was amended on June 15, 2010 with the enactment of P.A. 096-0927. Among other things, these amendments explicitly require the Commission to include analyses of broadband services in its Report, and also direct the Commission to collect and evaluate information from registered interconnected VoIP providers in Illinois.

This current Report, dated September 19, 2012, summarizes competitive developments in wireline and wireless telephone and broadband services, updated to reflect:

- the most recent available information reported to the Commission (as of December 31, 2011),
- the most recent data made available by the FCC (as of June 30, 2011) concerning high speed and wireless service provisioning,
- the most recent broadband deployment information made available in the National Broadband Map¹ (as of December 31, 2011) by the FCC and the National Telecommunications and Information Administration (NTIA).

The bulk of the wireline telephone data provided by Illinois carriers and compiled by Commission Staff is displayed in Appendix B of this report (Tables B1 through B4). Selected data from these tables are highlighted and displayed in several sections of the Report.²

¹ See <http://www.broadbandmap.gov/>.

² The bulk of the information provided herein reflects data reported by ILECs, CLECs, and Interconnected VoIP providers measuring provisioning as of December 31, 2011.

II. TELEPHONE SERVICES

A. Overview

Wireline telephone service, as that term is used in this report, refers to basic local voice service provided over the wireline public switched telephone network (PSTN). Wireline telephone service enables the end-user to place and receive calls to and from any other user on the PSTN, but, as the name suggests, does so only through physical wires or other comparable technologies from a fixed location (e.g., the customer's premises). The information presented in this section of this report focuses on the local line (or loop) that connects end-users to the PSTN, enabling the provision of wireline telephone service.

Technologies used to provide wireline telephone service vary. Local exchange carriers (LECs) traditionally have provisioned wireline telephone service over a "twisted" pair of copper wires and electronics that enable the customer to make or receive a single phone call. Carriers increasingly provide wireline telephone service over alternative technologies, such as fiber optics and associated electronics which allow multiple customers to make simultaneous phone calls over a single fiber optic strand. To enable uniform reporting and analysis of wireline telephone service regardless of the technologies utilized, the information presented herein is reported by voice grade equivalent (VGE) lines. Carriers report the number of lines provided by measuring the number of simultaneous phone calls that their customers are able to make or receive. This uniformity ensures direct comparability for purposes of reporting and analysis.

Two general classes of LECs provide wireline telephone service in Illinois: incumbent local exchange carriers (ILECs) and competitive local exchange carriers (CLECs). An ILEC is a telecommunications carrier (including its successors, assigns, and affiliates) that historically has served as the exclusive provider of wireline local telephone service in a specific service territory. CLECs are competitive carriers authorized and certificated by the Commission to provide local telephone service in competition with ILECs. As used herein, CLECs also include fixed voice over Internet protocol (VoIP) providers that are registered with the Commission. Some telecommunications carriers operate as both an ILEC and CLEC.³

³ Such carriers were requested to report to the Commission information separately for ILEC and CLEC operational units. Because of mergers and acquisitions, some ILECs have affiliates that are certified as CLECs and are providing lines within their incumbent local service areas. For purposes of this report all lines provided by an affiliate of an ILEC in that ILEC's service area have been treated as though provided by the ILEC. The approach adopted here with respect to the merged entities, to the extent feasible given the information supplied by the companies, minimizes the error of counting affiliates as competitors and of excluding competitive activity by ILEC affiliates outside their affiliated ILEC service areas.

The Illinois PUA and the Federal Telecommunications Act of 1996 encourage and endorse the development of competition in local telecommunications services. Together, these provide a framework for competitors to enter local markets by three fundamental and distinct methods:

- Building complete telecommunications networks using their own facilities,
- Leasing a portion of the facilities needed to serve end-user customers from ILECs as unbundled network elements (UNEs),
- Purchasing telecommunications services from ILECs at discounted prices and reselling these services to customers.

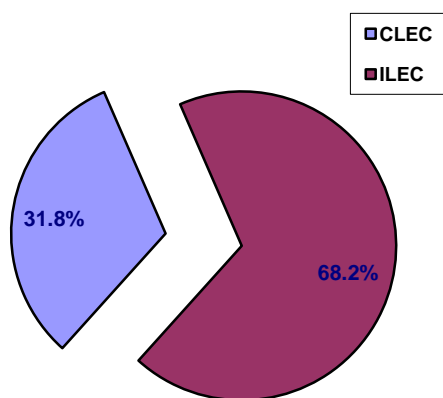
Recently, competitors have increasingly adopted additional methods of entry, including:

- Leasing all or a portion of the facilities needed to serve end-user customers from ILECs under commercial agreements,
- Leasing or purchasing telecommunications services from non-ILECs at discounted prices and reselling these services to customers,
- Providing telephone service over broadband connections and/or using Internet protocol facilities and software.

Regardless of the method utilized by a CLEC, significant cooperation and coordination between all carriers is crucial to the maintenance and proper operation of the PSTN. This remains true even where a CLEC has deployed a network utilizing 100% of its own facilities. Even under these circumstances, telephone traffic must be passed back and forth efficiently and reliably between the networks of all ILECs and all CLECs.

B. Statewide Competition In Retail Wireline Telephone Service in Illinois

Figure 1: ILEC and CLEC Retail Wireline Telephone Market Shares



As Figure 1 shows, at year-end 2011, reporting CLECs provided approximately 32% of all reported retail wireline telephone lines in Illinois. Approximately 5.6 million total retail wireline telephone lines were reported in Illinois. ILECs provided approximately 3.9 million lines (or 68%), while reporting CLECs provided approximately 1.8 million lines (or 32%). Table 1 displays these figures and comparable year-end figures for years 2001 through and including 2011.

Table 1: Retail Wireline Telephone Lines in Illinois

<i>Date</i>	<i>Total Lines</i>	<i>ILEC Lines</i>	<i>CLEC Lines</i>	<i>CLEC Share</i>
<i>Dec 2001</i>	9,036,493	7,628,679	1,407,814	16%
<i>Dec 2002</i>	8,727,943	7,029,967	1,697,976	19%
<i>Dec 2003</i>	8,327,835	6,549,268	1,778,567	21%
<i>Dec 2004</i>	8,103,503	6,262,826	1,840,677	23%
<i>Dec 2005</i>	7,805,958	6,462,064	1,343,894	17%
<i>Dec 2006</i>	7,221,713	6,108,281	1,113,432	15%
<i>Dec 2007</i>	7,061,103	5,684,221	1,376,882	20%
<i>Dec 2008</i>	6,691,734	5,228,376	1,463,358	22%
<i>Dec 2009</i>	6,278,499	4,810,584	1,467,915	23%
<i>Dec 2010</i>	6,091,400	4,307,415	1,783,985	29%
<i>Dec 2011</i>	5,645,938	3,852,215	1,793,723	32%

As Table 2 shows, 41 ILECs provided wireline telephone lines in Illinois in 2011.⁴ The 4 largest ILECs (AT&T, Frontier, Consolidated, and CenturyLink) provided over 98% of all ILEC retail wireline telephone lines, while the remaining 37 ILECs provided approximately 2% of the total ILEC lines in Illinois.

⁴ Fluctuation in ILEC counts are explained over time by changes in common control and certain reporting inconsistencies. Prior to 2004, four ILECs, C-R Telephone Company, El Paso Telephone Company, Odin Telephone Company, and Yates City Telephone Company, now under the control of Fairpoint Communications, were reported separately. Beginning in 2005, these entities were counted and reported as a single ILEC. Mid-Century Telephone Cooperative, Inc. subsequently replaced Yates City as the ILEC in the Yates City's ILEC service area. Its line counts are no longer included within the Fairpoint ILEC lines, but rather within the Mid-Century lines. Prior to 2004, two ILECs, Marseilles Telephone Company and Metamora Telephone Company, under the common control of MTCO Corporation were reported separately. Beginning in 2005, these entities were counted and reported as a single ILEC. Three mutual incumbent local exchange carriers, Clarksville Mutual Telephone, Grandview Mutual Telephone, and Leonore Mutual Telephone, were not required pursuant to Section 13-407 of the Illinois Public Utilities Act to and did not report line counts to the Commission for year-end 2010 and year-end 2011. The line counts for these providers are not included in the reported figures for year-end 2010 and year-end 2011. Based on prior-year information, the lines provided by these three companies account for less than 0.01% of all ILEC lines in Illinois. As of July 1, 2010, Frontier assumed control of ILEC properties formerly under the control of Verizon. One mutual incumbent local exchange carrier, Clarksville Mutual Telephone, did not report line counts to the Commission for year-end 2008 and year-end 2009. It is included in ILEC carrier counts for 2008 and 2009. Year-end 2008 and year-end 2009 line counts for this entity were assumed to be the same as line counts reported by this entity for year-end 2005. Two mutual incumbent local exchange carriers, Clarksville Mutual Telephone and Kinsman Mutual Telephone Company, did not report line counts to the Commission, but are included in ILEC carrier counts for 2006 and 2007. Year-end 2006 and 2007 line counts for these two entities were assumed to be the same as line counts reported by these entities for year-end 2005. Two ILECs, Bergen Telephone Company and Sharon Telephone Company, failed to respond to the Commission's CDR for year-end 2001.

Seventy-six CLECs reported providing retail wireline telephone service in Illinois in 2011.⁵ Of these 76 CLECs, the 4 largest (Comcast, Windstream, WOW!, and Verizon) accounted for approximately 68% of all reported CLEC retail wireline telephone lines, while the remaining 72 CLECs provided approximately 32% of all reported CLEC retail wireline telephone lines.

Table 2: Retail Wireline Telephone Providers in Illinois

<i>Date</i>	<i>No. of Retail wireline telephone Providers Reporting</i>	<i>No. of ILEC wireline telephone Providers Reporting</i>	<i>No. of CLEC wireline telephone Providers Reporting</i>
<i>Dec 2001</i>	82	47	35
<i>Dec 2002</i>	94	49	45
<i>Dec 2003</i>	102	49	53
<i>Dec 2004</i>	114	49	65
<i>Dec 2005</i>	114	45	69
<i>Dec 2006</i>	136	45	91
<i>Dec 2007</i>	125	45	80
<i>Dec 2008</i>	132	45	87
<i>Dec 2009</i>	129	45	84
<i>Dec 2010</i>	123	41	82
<i>Dec 2011</i>	117	41	76

C. Competition from Wireless and VoIP Providers

As Table 1 shows, the total reported retail wireline telephone lines fell by approximately 3.4 million lines (or nearly 38%) between year-end 2001 and year-end 2011. These reductions in total reported lines are consistent with other evidence that customers are substituting non-reported (and non-reporting) services for reported wireline telephone services.

Several substitutes for reported wireline telephone service are not reflected in the figures reported in Table 1. Two such services are: wireless mobile (or cellular) service and nomadic VoIP (Voice over Internet Protocol) service.

In the past, telecommunications customers generally purchased cellular service as a complement to, rather than as a substitute for, traditional wireline

⁵ These figures treat affiliated CLECs under common control as a single competitive entity.

telephone service.⁶ Recent survey data and substitution studies indicate that consumers increasingly are substituting wireless service for wireline service.⁷ Because this report summarizes competitive substitution for ILEC wireline services, wireless substitution for wireline services is increasingly influencing the competitive information reported.

VoIP services also substitute for traditional wireline telephone service. Many VoIP services closely resemble traditional circuit switched telephone service, but are provided using Internet protocol technologies. Variations of VoIP service include non-nomadic (facilities-based) services customers may use from a single location only and nomadic services that can be accessed from multiple locations (e.g., from any broadband access point). Customers subscribing to VoIP services appear to do so in substitution of, rather than in addition to, their traditional wireline telephone service.

Reported reductions in wireline telephone lines in Illinois between 2001 and 2009 likely were attributable, in part, to the fact that both nomadic and non-nomadic VoIP lines were not fully included or accounted for in the total reported line counts. In 2010, Public Act 96-0927 required non-nomadic VoIP providers (registered interconnected VoIP providers) to provide basic information to the Commission. Subsequent reporting compliance by non-nomadic VoIP providers as a result of Public Act 96-0927 accounts for some of the increase in reported CLEC lines between 2009 and 2010.

While registered VoIP providers now report their VoIP lines counts to the Commission, nomadic VoIP providers do not. Due to their 911 obligations, VoIP providers supply 911 service information used to populate E-911 databases.⁸ As a result, E-911 information can be used as a proxy for line count information.

Companies that maintain E-911 databases in Illinois reported to the Commission counts of non-wireless E-911 listings in Illinois at year-end 2011. Typically, E-911 databases contain information for each residential line in the communities served by the E-911 system. Thus, E-911 listings provide a reasonably accurate proxy of the number of residential telephone lines in the communities served by E-911 systems. These counts do not provide a perfect proxy. A few selected communities do not yet have E-911 systems, which will

⁶ Since provider reported line counts, like those summarized in this report, do not reveal whether and where customers have substituted cellular service for some or all of their traditional wireline telephone lines, line count based analyses of competition have generally excluded wireless lines from counts used to calculate incumbent carrier market shares.

⁷ Federal Communications Commission, Fifteenth Report, In the Matter of Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993, Annual Report and Analysis of Competitive Market Conditions With Respect to Commercial Mobile Services, FCC 11-103, Released June 27, 2011, at ¶ 363.

⁸ E-911 databases contain, for telephones with access to the PSTN, telephone number, street address, and other information used within the 911 system to identify and dispatch emergency service personnel in response to emergency assistance requests.

cause the number of reported residential E-911 lines to fall short of the number of residential telephone lines in service.⁹ Moreover, while the FCC has required providers using VoIP technologies to provide E-911 service, not all VoIP providers are in full compliance. Thus, E-911 listings likely understate the number of residential telephone lines in service.¹⁰

The number of unreported competitive residential non-wireless telephone lines in Illinois can be estimated by examining the difference between E-911 listings and the number of lines reported to the Commission. Year-end 2011 E-911 figures suggest that approximately 224,000 residential competitive provider lines went unreported to the Commission at year-end 2011.¹¹

Table 3: Estimated Total Retail Lines in Illinois (including Non-Reported Residential E-911 Listings)

<i>Date</i>	<i>Total Lines</i>	<i>ILEC Lines</i>	<i>CLEC Lines</i>	<i>ILEC Share</i>	<i>CLEC Share</i>
<i>Dec 2011</i>	5,870,053	3,852,215	2,017,836	66%	34%

This estimated total of 224,000 unreported residential CLEC lines at year-end 2011 (displayed in Table 3) likely falls short of the actual number of unreported lines. This estimate would increase if the E-911 data included listings for areas in which E-911 service was not available at year-end 2011, and if all VoIP providers had fully functional E-911 capabilities. It also does not account for the degree to which business lines are unreported. Thus, there remains, based on the reductions in line counts reported in Table 1, unreported retail lines that cannot be explained by information contained in the E-911 data.

The most significant omission in the tables presented above is the total absence of wireless information. In particular, Table 3 does not account for the degree to which customers are substituting wireless telephone service for wireline telephone service. It is possible to estimate the impact of wireless substitution for ***residential*** communications markets statewide in Illinois.

⁹ For information on the E-911 systems, including their availability across Illinois, see Illinois Commerce Commission, 2011 Illinois 911 Status Report at: <http://www.icc.illinois.gov/911/>.

¹⁰ There are also factors that could cause E-911 listings to overstate the number of residential telephone lines in service. For example, E-911 listings might overstate publicly provided telecommunications lines because of a provider's failure to remove listings for customers that have discontinued service in a timely manner. The analysis contained above is premised on the assumption that such factors are relatively insignificant. Nevertheless, as cautioned above, without systematic evidence that would shed light on the accuracy of these assumptions, caution should be exercised when interpreting the results reported here.

¹¹ In areas where there is no E-911 system, line counts were reported that were not reflected in the E-911 system. Thus, for example, in the Macomb LATA, where there were several areas without E-911 at the end of 2011, reported line counts actually exceeded E-911 counts. E-911 information for LATAs where E-911 line counts fell below reported line counts are excluded from the figures above.

Table 4: Estimated Residential Retail Lines in Illinois (including Non-Reported Residential E-911 Listings)

<i>Date</i>	<i>Total Lines</i>	<i>ILEC Lines</i>	<i>CLEC Lines</i>	<i>ILEC Share</i>	<i>CLEC Share</i>
<i>Dec 2011</i>	3,245,797	2,035,952	1,209,845	63%	37%

Table 4 provides estimates of residential telephone market shares without accounting for wireless substitution. Table 5 provides residential market share estimates with wireless substitution included. Data collected and reported by the Centers for Disease Control indicate in 2011 that an estimated 32.3% of the adult population in Illinois lived in households with only wireless service.¹² The FCC reported that an additional 5.3% of households in Illinois had no service during the second quarter of 2011.¹³ Assuming that 5.3% and 32.3% of what would otherwise be residential wireline lines were displaced by no service or wireless substitution, respectively, Table 5 displays the estimated overall degree to which residential consumers have substituted other services for traditional ILEC provided wireline service.¹⁴

Table 5: Retail Residential Lines and Market Shares in Illinois (with Estimated Non-Reported Residential E-911 Listings, Estimated Wireless Only Households and Estimated Households with No Phones)

<i>Date</i>	<i>Total Lines</i>	<i>ILEC Lines</i>	<i>CLEC Lines</i>	<i>No Phone Lines</i>	<i>Wireless Only Lines</i>
<i>Dec 2011</i>	5,201,598 (100%)	2,035,952 (39.1%)	1,209,845 (23.3%)	275,685 (5.3%)	1,680,116 (32.3%)

The estimates displayed in Table 5 suggest that approximately 39% of Illinois residential customers received wireline service from an ILEC in 2011, and approximately 61% of Illinois residential customers did not take wireline service from an ILEC.¹⁵

¹² Stephen J. Blumberg and Julian V. Luke, *Wireless Substitution: Early Release of Estimates From the National Health Interview Survey, July – December 2011*, National Center for Health Statistics, Centers for Disease Control, June, 28 2012, available at <http://www.cdc.gov/nchs/data/nhis/earlyrelease/wireless201206.pdf>.

¹³ FCC, Telephone Subscribership in the United States (Data through July 2011), Released December 2011, at Table 3.

¹⁴ The estimates here were computed by assuming that the estimated 3,245,797 residential lines (including non-reported E9-1-1 lines) represent 62.4% (or 100% - 5.3% - 32.3%) of all lines that would, with 100% penetration and no wireless substitution, be provided to residential telephone customer in Illinois. These estimate should be interpreted with caution as they will not be precise if, for example, the 32.3% of the adult population in Illinois living in households with only wireless service would not purchase 32.3% of all lines that would otherwise, with 100% penetration and no wireless substitution, be provided to residential telephone customer in Illinois.

¹⁵ The estimates in Table 5 do not fully capture the degree to which consumers have substituted away from ILEC wireline services. Notably, many customers that still subscribe to ILEC wireline phone service also subscribe to wireless service. Many also subscribe to

D. Retail Wireline Telephone Competition by LATA

This section of the report provides an overview of wireline telephone competition broken down by Local Access and Transport Area (LATA). LATAs are the geographic areas within which Bell Operating Companies (BOCs), such as Ameritech Illinois (now AT&T Illinois) were permitted to carry telephone traffic following their divestiture from AT&T in 1984.

There are fourteen LATAs with substantial geographic areas in Illinois which contain a significant number of Illinois customers. An additional four LATAs lie predominately outside of Illinois and encompass relatively few Illinois customers.¹⁶ Information applicable to the Illinois portion of these 4 LATAs will be included with information for the 14 LATAs that lie predominately in Illinois.¹⁷ Additional detail concerning Illinois LATAs is presented in Appendix A.

Reporting and analysis of wireline telephone data by LATA has several important advantages. First, disaggregation of statewide information into 14 separate LATA markets illustrates important competitive differences across Illinois markets and regions that cannot be discerned from data aggregated at the state level. Second, LATAs are a natural unit for the reporting of many types of information by telephone companies. Notably, the telephone numbers provided to LECs for assignment to their customers are, with limited exceptions, assigned uniquely to LATAs.¹⁸ This permits the Commission to readily identify the LATAs within which telephone customers reside.¹⁹ Finally, data disaggregated by LATA still are sufficiently aggregated to protect sensitive competitive information, and the proprietary concerns of local telephone service providers.²⁰

broadband service. Such customers almost certainly rely on wireless and broadband services to partially replace their ILEC wireline service (for example, substituting wireless calls, VoIP calls, and text messages for calls that they formerly would have made using their ILEC wireline services).

¹⁶ Although LATA boundaries were created in order to delineate the geographical area within which BOCs could offer long distance services, other LATA boundaries have been created in order to segment non-BOC service territories. The LATA geography adopted here follows Telcordia Technologies, Inc. ("Telcordia" f/k/a Bellcore) conventions as delineated in the local exchange routing guide (LERG).

¹⁷ Information is aggregated in this manner to protect the confidentiality of individual carrier information reported to the Commission.

¹⁸ Traditionally, blocks of telephone numbers have been assigned uniquely to rate exchange areas, which in turn, have been uniquely assigned to LATAs.

¹⁹ The use of more "traditional" means to identify the location of individual telephone customers, such as the county of residence, is, at best, problematic, since telephone numbers are assigned to geographic areas with boundaries that are not congruent with the boundaries of the more traditional geographical divisions.

²⁰ Per the Commission's Competition Data Request, the Commission is offering proprietary treatment to individual company retail provisioning information. Therefore, all retail provisioning numbers have been aggregated into carrier classes.

Table 6 – Illinois LATA Demographic Data
U.S. Census 2010

<i>LATA Name</i>	<i>Area (Sq. Miles)</i>	<i>Population</i>	<i>No. of Households</i>	<i>Population per Sq. Mile</i>	<i>Households per Sq. Mile</i>
<i>Chicago, IL</i>	8,504	8,725,868	3,199,681	1,000	367
<i>Rockford, IL ¹</i>	2,124	425,008	164,759	209	81
<i>Springfield, IL</i>	3,028	362,039	150,834	119	49
<i>St Louis, MO</i>	6,718	801,380	314,902	124	49
<i>Champaign, IL ²</i>	3,635	347,007	139,908	93	38
<i>Davenport, IA</i>	2,058	217,944	90,141	101	42
<i>Peoria, IL</i>	4,834	476,393	191,089	101	41
<i>Sterling, IL</i>	2,966	235,082	90,941	85	33
<i>Forrest, IL</i>	3,698	281,640	108,458	73	28
<i>Cairo, IL</i>	4,863	313,137	127,451	63	26
<i>Mattoon, IL</i>	4,248	220,444	87,598	53	21
<i>Quincy, IL</i>	3,682	159,855	63,531	41	16
<i>Macomb, IL</i>	3,248	128,972	52,301	42	17
<i>Olney, IL</i>	4,309	135,863	55,378	32	13
<i>Total - All LATAs</i>	57,914	12,830,632	4,836,972	222	84
<i>Average</i>	4,137	916,474	345,498	---	---
<i>Standard Deviation</i>	1,673	2,172,433	794,349	---	---
¹ Includes information for those portions of the Southeast and Southwest Wisconsin LATAs located in Illinois.					
² Includes information for those portions of the Indianapolis and Terre Haute Indiana LATAs located in Illinois.					

Table 6 displays basic demographic information for each Illinois LATA. It reveals that there is considerable variation in LATA demographics within Illinois. Not surprisingly, the Chicago LATA surpasses all other Illinois LATAs both in total population and population density.

Table 7 shows CLEC market shares by LATA. These market share estimates are based upon reported wireline telephone lines, and estimates of residential lines contained in the E-911 information not reported directly to the Commission.

**Table 7: CLEC Market Shares by LATA
December 31, 2011**

<i>LATA Name</i>	<i>Reported CLEC Market Share</i>	<i>Reported CLEC Residential Market Share</i>	<i>Reported CLEC Business Market Share</i>	<i>CLEC Market Share with Estimated Unreported Residential E- 911 Capable VoIP Lines</i>	<i>CLEC Residential Market Share with Estimated Unreported Residential E- 911 Capable VoIP Lines</i>
<i>Statewide</i>	31.8%	32.6%	30.8%	34.4%	37.3%
<i>Chicago, IL</i>	35.2%	35.9%	34.4%	36.4%	38.2%
<i>Rockford, IL¹</i>	39.1%	41.3%	35.6%	45.9%	51.5%
<i>Cairo, IL</i>	13.9%	13.5%	14.6%	24.8%	30.0%
<i>Sterling, IL</i>	24.6%	29.9%	15.6%	27.4%	34.0%
<i>Forrest, IL</i>	23.7%	28.5%	17.0%	29.2%	37.0%
<i>Peoria, IL</i>	26.0%	28.7%	21.8%	30.3%	35.2%
<i>Champaign, IL²</i>	21.9%	27.2%	16.4%	33.5%	45.7%
<i>Springfield, IL</i>	22.5%	29.0%	15.8%	28.6%	39.4%
<i>Quincy, IL</i>	12.0%	8.0%	18.2%	12.0%	8.0%
<i>St Louis, MO</i>	23.7%	25.0%	21.2%	30.6%	34.8%
<i>Davenport, IA</i>	22.1%	24.3%	18.9%	30.1%	36.5%
<i>Mattoon, IL</i>	9.9%	13.7%	3.7%	20.9%	29.6%
<i>Macomb, IL</i>	12.4%	15.5%	5.9%	12.4%	15.5%
<i>Olny, IL</i>	10.3%	10.3%	10.1%	10.3%	10.3%

¹ Includes information for those portions of the Southeast and Southwest Wisconsin LATAs located in Illinois.
² Includes information for those portions of the Indianapolis and Terre Haute Indiana LATAs located in Illinois

E. CLEC Methods of Provisioning Retail Wireline Telephone Services

As previously noted, CLECs can provide wireline telephone service to customers via several methods:

- Building and using their own facilities exclusively,
- Leasing a portion of the facilities needed to serve end-user customers from ILECs as unbundled network elements,
- Leasing all or a portion of the facilities needed to serve end-user customers from ILECs under commercial agreements,
- Purchasing telecommunications services from ILECs at discounted prices and reselling these services to customers,
- Leasing or purchasing telecommunications services from non-ILECs at discounted prices and reselling these services to customers, and
- Providing telephone service over broadband connections and/or using Internet protocol facilities.

These methods are not mutually exclusive; they can each be employed by a particular CLEC to provide services at different times and/or in different regions. For example, a CLEC may deploy its own network in a particular part of the state while using resale to provide services to consumers in another area of the state.

The basic network elements used in the provision of wireline telephone include local loops (connecting customer premises to telephone company switching equipment), local switching, and interoffice transport (between telephone company switches). In some circumstances CLECs may lease some of these basic network elements from an ILEC pursuant to ILEC obligations under federal and/or state law. CLECs can provide service using various combinations of ILEC supplied network elements and their own self-supplied elements. The most common variant of this approach is to lease ILEC local loops and self-supply local switching.²¹ When CLECs combine leased ILEC loops with their own (or third party supplied) local switching, such combinations are termed unbundled network element loop (UNE-L) combinations.

In some cases, CLECs lease all of the basic network elements from an ILEC. When purchased according to the rates, terms, and conditions prescribed by the Telecommunications Act of 1996 (and FCC rules implementing that Act), the term applied to describe leasing of complete combinations of local loops, local switching, and interoffice transport is UNE-P. Although ILECs have been relieved of most federal and state obligations to provide UNE-P, CLECs have entered into commercial leasing agreements whereby they lease such combinations according to commercially negotiated rates. These agreements typically involve an ILEC providing to a CLEC all such network elements at rates, terms and conditions negotiated between the parties (rather than at rates determined pursuant to state or federal law).

Because many reporting carriers no longer distinguish between element combinations leased through UNE-L, UNE-P or commercial agreements, lines provided through these various methods are, beginning in 2010, consolidated in the figures below. Similarly, many reporting carriers do not distinguish between lines provided over their own facilities and lines provided over broadband and/or Internet protocol technology. Therefore, lines provided through these methods, beginning in 2010, are consolidated in the figures below

²¹ In such instances, the CLEC may or may not lease ILEC transport to connect a loop to its switch or to interconnect its own switches to either ILEC switches or to other (including its own) CLEC switches.

Table 8: CLEC Reported Retail Wireline Telephone Lines by Provisioning Method
(Percentages of Total for Each Year in Brackets)

	<i>Own Facilities and VoIP</i>	<i>UNE-L</i>	<i>UNE-P³</i>	<i>Commercial Agreement with ILEC¹</i>	<i>Resale from ILEC</i>	<i>Use of 3rd Party Non-ILEC²</i>	<i>All Methods</i>
<i>Dec 2001</i>	460,598 (33%)	314,459 (22%)	314,718 (22%)	NA	NA	NA	1,407,814 (100%)
<i>Dec 2002</i>	433,131 (26%)	355,658 (21%)	644,932 (38%)	NA	318,039 (23%)	NA	1,697,976 (100%)
<i>Dec 2003</i>	434,524 (24%)	362,102 (20%)	804,036 (45%)	NA	264,255 (16%)	NA	1,778,567 (100%)
<i>Dec 2004</i>	616,218 (34%)	278,616 (15%)	793,410 (43%)	NA	177,905 (10%)	NA	1,840,677 (100%)
<i>Dec 2005</i>	635,691 (47%)	245,783 (18%)	384, 975 (29%)	NA	152,433 (8%)	NA	1,343,894 (100%)
<i>Dec 2006</i>	369,098 (33%)	311,131 (28%)	59,076 (5%)	209,048 (19%)	139,202 (13%)	25,877 (2%)	1,113,432 (100%)
<i>Dec 2007</i>	635,391 (46%)	277,319 (20%)	NA	255,825 (19%)	195,667 (14%)	12,670 (1%)	1,376,882 (100%)
<i>Dec 2008</i>	804,510 (55%)	303,265 (21%)	NA	123,607 (8%)	148,532 (10%)	83,444 (6%)	1,463,358 (100%)
<i>Dec 2009</i>	886,950 (60%)	270,607 (18%)	NA	119,745 (8%)	175,592 (12%)	15,021 (1%)	1,467,915 (100%)
<i>Dec 2010</i>	1,118,056 (63%)	415,493 (23%)			191,452 (11%)	58,984 (3%)	1,783,985 (100%)
<i>Dec 2011</i>	1,370,870 (76%)	245,363 (14%)			173,498 (10%)	3,992 (0%)	1,793,723 (100%)

¹ Category added in 2006. Prior to 2006 lines in this category, if any, may have been included along with UNE-P and/or resale.
² Category added in 2006. Prior to 2006 lines in this category may have been included along with resale.
³ Lines reported as UNE-P are, beginning with Dec 2007, included as lines in the Commercial Agreement with ILEC category.

Table 8 shows that at year-end 2011, approximately 1,371,000 CLEC retail wireline telephone lines in Illinois (76% of the CLEC total) were provisioned entirely over CLEC owned facilities or using Internet protocol technologies. This is the highest such figure to date. Approximately 245,000 CLEC retail wireline telephone lines (14% of all CLEC lines) were provisioned over facilities leased (in part or in whole) from ILECs. Approximately 173,000 CLEC lines (about 10%) were provided by CLECs purchasing discounted services from ILECs and reselling them to their customers. Finally, about 4,000 lines (or less than 1%) were provided by CLECs using non-ILEC third party facilities and/or services.

As Table 9 shows, 48 CLECs provided some wireline telephone service completely over their own facilities or using VoIP technologies. Twenty-six CLECs provided some wireline telephone service entirely over leased facilities. Statewide, 35 CLECs provided wireline telephone service over resold lines. Finally, 11 CLECs provided wireline telephone service using non-ILEC third party facilities and/or services.

Table 9: CLEC Retail Wireline Telephone Providers by Provisioning Method

	<i>Own Facilities or VoIP</i>	<i>UNE-L</i>	<i>UNE-P²</i>	<i>Commer cial Agreem ent with ILEC</i>	<i>Resale</i>	<i>Use of 3rd Party Non- ILEC</i>	<i>All Methods¹</i>
<i>Dec 01</i>	11	12	11	NA	23	NA	35
<i>Dec 02</i>	10	14	16	NA	30	NA	45
<i>Dec 03</i>	14	14	23	NA	29	NA	53
<i>Dec 04</i>	14	15	40	NA	28	NA	65
<i>Dec 05</i>	11	16	37	NA	29	NA	69
<i>Dec 06</i>	19	17	21	24	40	13	91
<i>Dec 07</i>	15	18	NA	39	37	6	80
<i>Dec 08</i>	19	19	NA	32	39	10	87
<i>Dec 09</i>	17	18	NA	35	44	12	84
<i>Dec 10</i>	37	32			42	10	82
<i>Dec 11</i>	48	26			35	11	76
¹ The sum of CLECs providing services over the respective provisioning methods exceeds the total number of CLECs providing services because some CLECs provide services using more than one method of provisioning.							
² Companies reported as UNE-P are, beginning with Dec 2007, included as companies in the Commercial Agreement with ILEC category.							

F. Mobile Wireless Subscribership

Data on mobile wireless subscribership are reported to the FCC by facilities-based wireless providers on a state-by-state basis. Facilities-based wireless providers serve subscribers using electromagnetic spectrum that they are licensed to utilize or manage.²² Wireless mobile service is similar to wireline telephone service in that it permits subscribers to place and receive calls to and from any other user on the PSTN.

²² FCC, Local Telephone Competition: Status as of December 31, 2001, Released July 2002, at 1-2.

Table 10 shows wireless subscribership data for Illinois and for the nation as a whole (reported biannually to the FCC). In June of 2011, mobile wireless providers reported approximately 12.3 million subscribers in Illinois, the largest such figure to date.

Table 10: Mobile Wireless Subscribers
(Millions)²³

	<i>Total US Subscribers</i>	<i>Total IL Subscribers</i>
DEC 1999	79.7	3.9
JUNE 2000	90.6	4.3
DEC 2000	101.0	5.1
JUNE 2001	114.0	5.6
DEC 2001	124.0	5.6
JUNE 2002	130.8	5.4
DEC 2002	138.9	6.5
JUNE 2003	147.6	6.8
DEC 2003	157.0	7.2
JUNE 2004	167.3	7.5
DEC 2004	181.1	8.1
JUNE 2005	192.1	8.2
DEC 2005	203.7	8.7
JUNE 2006	217.4	9.1
DEC 2006	229.6	9.6
JUNE 2007	238.2	9.9
DEC 2007	249.2	10.3
JUNE 2008	255.7	10.6
DEC 2008	261.3	10.9
JUNE 2009	265.3	11.1
DEC 2009	274.3	11.5
JUNE 2010	278.9	11.6
DEC 2010	285.1	12.1
JUNE 2011	290.3	12.3

III. BROADBAND SERVICES

A. Overview

²³ Source: Federal Communications Commission, Industry Analysis and Technology Division, Wireline Competition Bureau, Local Telephone Competition: Status as of June 30, 2011, Released June 2012. Subscriber counts for periods before June 2005 include only counts for subscribers served by large providers (those with over 10,000 subscribers in a state).

Section 13-407 of the PUA requires that the Commission monitor and analyze the deployment of high-speed (broadband) communications services in Illinois. Section 13-407 effectively uses the terms “high speed” and “broadband” communications interchangeably, and the Commission adopts that convention in this Report. As defined herein, such high-speed telecommunications services provide the subscriber with data transmission at speeds in excess of 200 kilobits per second (kbps) in at least one direction.²⁴ This definition matches the definition of “advanced telecommunications services” as used in the PUA.²⁵ This definition also matches that used by the FCC in its data collection activities and analyses of high-speed telecommunications markets.²⁶

Information concerning high-speed service provisioning is reported by state to the FCC only by facilities-based providers of high-speed lines. Carriers do not report high-speed capable lines that are obtained from other carriers for resale to end users or Internet Service providers (ISPs). This practice ensures that each high-speed line is reported only once by the underlying provider.²⁷ The information reported here encompasses three methods of high-speed service provisioning:

- high speed service over ADSL technology,
- high-speed service over coaxial cable (cable modem) technology.
- high-speed service over “other” technologies.

²⁴ 220 ILCS 5/13-517

²⁵ The information presented herein concerns the telecommunications services that are the subject of the provisions of Section 13-517 of the Act.

²⁶ It should be noted that this definition excludes several services that sometimes are referred to as high speed services, such as basic rate integrated services digital network (ISDN-BRI) service, some lower speed asymmetric digital subscriber line (ADSL) services, some lower speed services that connect subscribers to the Internet over cable systems, and services that connect subscribers to the internet over mobile wireless systems. The terms “high-speed telecommunications service”, “advanced telecommunications service” and “broadband service” often are used interchangeably and sometimes inconsistently. For example, mobile wireless providers often offer Internet access over mobile wireless technology marketed as broadband wireless Internet access despite the fact that such technology generally restricts access to speeds slower than users might otherwise obtain from traditional “dial-up” wireline technology. To add to the confusion in terminology, the FCC defines “advanced telecommunications capability” and “advanced services” as service that provide the subscriber with transmission speeds in excess of 200 kbps in BOTH the “upstream” and “downstream” directions. Confusion and misunderstanding in the use of these various terms caused the FCC to state in one report submitted to the U.S. Congress that “[I]n light of its now common and imprecise usage, we decline to use the term broadband to describe any of the categories of services on facilities that we discuss in this report. FCC, Deployment of Advanced Telecommunications Capability: Second Report, August 2000, Released August 21, 2000.

²⁷ Prior to mid-year 2005, only providers with at least 250 lines in a given state reported to the FCC. There is no indication of how comprehensively small providers, many of which serve rural areas with relatively small populations, are represented in the FCC data summarized here for periods prior to mid-year 2005. See FCC, High Speed Services for Internet Access: Status as of December 31, 2001, Released July 2002, at 1-2.

ADSL and cable modem technologies are most commonly used to provide services to residential customers. These technologies typically provide customers a single path to the Internet, generally at comparable quality and price levels and transmission speeds. As a result, services provided via ADSL and cable modem technologies generally are viewed as close substitutes. Technologies in the “other” category include symmetric DSL, traditional T1 wireline, fiber optic to the customer’s premises, satellite, and (terrestrial) fixed wireless technologies.²⁸

The following descriptions of ADSL and cable modem technologies are taken from the FCC’s Deployment of Telecommunications Capability: Second Report:

ADSL Technology

With the addition of certain electronics to the telephone line, carriers can transform the copper loop that already provides voice service into a conduit for high-speed data traffic. While there are multiple variations of DSL ... most DSL offerings share certain characteristics. With most DSL technologies today, a high-speed signal is sent from the end-user’s terminal through the last 100 feet and the last mile (sometimes a few miles) consisting of the copper loop until it reaches a Digital Subscriber Line Access Multiplexer (DSLAM), usually located in the carrier’s central office. At the DSLAM, the end-user’s signal is combined with the signals of many other customers and forwarded through a switch to middle mile facilities.

As its name suggests, ADSL provides speeds in one direction (usually downstream) that are greater than the speeds in the other direction. Many, though not all, residential ADSL offerings provide speeds in excess of 200 kbps in only the downstream path with a slower upstream path and thus do not meet the standard for advanced telecommunications capability. However, ADSL permits the customer to have both conventional voice and high-speed data carried on the same line simultaneously because it segregates the high frequency data traffic from the voice traffic. This segregation allows customers to have an “always on” connection for the data traffic and an open path for telephone calls over a single line. Thus

²⁸ Services provided over technologies in the “other” category vary greatly in quality, speed, and price. These technologies commonly are used to provide service to medium and large business customers, rather than residential customers. Therefore, comparison of figures for the “other” category to ADSL and cable modem figures is largely an apples to oranges exercise --- as is comparison of “other” figures across states. Accordingly, while figures for the “other” technologies category are presented here for completeness, caution should be exercised in their interpretation.

a single line can be used for both a telephone conversation and for Internet access at the same time.²⁹

Cable Modem Technology

Cable modem technologies rely on the same basic network architecture used for many years to provide multichannel video service, but with upgrades and enhancements to support advanced services. The typical upgrade incorporates what is commonly known as a hybrid fiber-coaxial (HFC) distribution plant. HFC networks use a combination of high-capacity optical fiber and traditional coaxial cable. Most HFC systems utilize fiber between the cable operators' offices (the "headend") and the neighborhood "nodes." Between the nodes and the individual end-user homes, signals travel over traditional coaxial cable infrastructure. These networks transport signals over infrastructure that serves numerous users simultaneously, i.e., a shared network, rather than providing a dedicated link between the provider and each home, as does DSL technology.³⁰

B. Statewide High-Speed Line Subscribership in Illinois

Table 11 shows high-speed line counts nationwide and in Illinois, as reported biannually to the FCC. This table indicates that nationwide and in Illinois there has been substantial growth in high-speed telecommunications lines. The reported count of nearly 8.6 million high speed lines in Illinois (as of June 2011) significantly exceeds the estimated count of approximately 6.5 million retail wireline telephone lines (as of June 2010).

²⁹ FCC's Deployment of Telecommunications Capability: Second Report, August 2000, at ¶¶ 35-36 (footnotes omitted).

³⁰ FCC's Deployment of Telecommunications Capability: Second Report, August 2000, at ¶ 29 (footnotes omitted).

Table 11: High-Speed Lines
(Thousands)³¹

	Total U.S. Lines	Total IL Lines
DEC 1999	2,754	66
JUNE 2000	4,107	149
DEC 2000	7,070	242
JUNE 2001	9,242	325
DEC 2001	12,793	423
JUNE 2002	15,788	526
DEC 2002	19,881	734
JUNE 2003	22,995	841
DEC 2003	28,230	1,089
JUNE 2004	31,951	1,271
DEC 2004	37,352	1,498
JUNE 2005	42,518	1,817
DEC 2005	51,218	2,160
JUNE 2006	65,271	2,666
DEC 2006	82,810	3,539
JUNE 2007	101,008	4,310
DEC 2007	121,165	5,084
DEC 2008	102,043	4,265
DEC 2009	133,148	5,651
JUNE 2010	152,920	6,464
JUNE 2011	206,124	8,645

Table 12 displays high-speed line counts in Illinois by technology. At year-end 2011, the number of high-speed connections provided over ADSL technology was exceeded by the number of such connections provided over Cable Modem technology. This table also displays the continuing emergence and importance of mobile wireless high-speed connections.

³¹ Source: Federal Communications Commission, Industry Analysis and Technology Division, Wireline Competition Bureau, Internet Access Services: Status as of June 30, 2011, Released June 2012. Line counts for periods before June 2005 include only lines provided by large providers (those with over 250 lines in a state).

Table 12: Illinois High-Speed Connections by Technology

June 30, 2011

(Thousands)³²

ADSL	Cable Modem	Mobile Wireless	Other	Total
1,576	1,768	5,163	138	8,645

Table 13 shows high-speed percentages by download speed in Illinois.

Table 13: Illinois Percentage of High-Speed Connections by Download Speed

June 30, 2011³³

% over 200 kbps Downstream and Upstream	% at least 768 kbps Downstream and over 200 kbps Upstream	% at least 3 mbps Downstream and over 200 kbps Upstream	% at least 6 mbps Downstream and over 200 kbps Upstream	% at least 10 mbps Downstream and over 200 kbps Upstream
91.8	78.4	39.0	27.4	17.1

C. Deployment in Incumbent Telephone Company Service Areas

Public Act 096-0927 designates the non-profit *Partnership for a Connected Illinois* ("PCI") as the primary entity for collecting broadband data in Illinois. Among its other responsibilities, PCI is to:

Collaborate with the Department [DCEO] and the Illinois Commerce Commission regarding the collection of the information required by this Section to assist in monitoring and analyzing the broadband markets and the status of competition and deployment of broadband services to consumers in the State.

The National Broadband Map³⁴, maintained through a joint effort of the FCC and National Telecommunications and Information Administration ("NTIA"), publishes certain of the information collected by PCI. Table 14, below, provides broadband deployment data by ILEC service area taken from the National Broadband Map.

³² Source: Federal Communications Commission, Industry Analysis and Technology Division, Wireline Competition Bureau, Internet Access Services: Status as of June 30, 2011, Released June 2012.

³³ Source: Federal Communications Commission, Industry Analysis and Technology Division, Wireline Competition Bureau, Internet Access Services: Status as of June 30, 2011, Released June 2012.

³⁴ See <http://www.broadbandmap.gov/>.

Table 14: Broadband Deployment in ILEC Service Areas
(Data as of December 31, 2011)

<i>ILEC Service Area</i>	<i>% of Population with Access to Download Speeds > 0.769 Mbps and Upload Speeds > 0.2 Mbps</i>	<i>% of Population with Access to Download Speeds > 3 Mbps and Upload Speeds > 0.768 Mbps</i>	<i>% of Population with Access to DSL Broadband¹</i>	<i>% of Population with Access to Cable Modem Broadband¹</i>	<i>% of Population with Access to Wireless Broadband¹</i>	<i>% of Population with Access to Fiber Broadband¹</i>
<i>Nationwide</i>	99.6%	96.7%	88.9%	85.2%	98.7%	17.8%
<i>Statewide</i>	99.9%	97.8%	89.0%	75.6%	99.8%	0.6%
Adams Telephone Cooperative	98.9%	64.4%	87.3%	2.3%	97.3%	51.9%
Alhambra - Grantfork Telephone Company	100.0%	97.2%	94.3%	49.9%	99.0%	0.0%
Cambridge Telephone Company	100.0%	89.8%	22.5%	63.5%	100%	0.0%
Cass Telephone Company	99.9%	94.9%	92.2%	58.2%	98.9%	0.0%
Clarksville Mutual Telephone Company	100.0%	57.8%	4.5%	9.8%	100.0%	0.0%
C-R Telephone Company	99.9%	87.7%	63.9%	44.4%	97.1%	0.0%
Crossville Telephone Company	100.0%	86.0%	85.5%	39.4%	98.1%	0.0%
Egyptian Telephone Cooperative Association	97.5%	93.13%	89.1%	6.4%	91.2%	0.0%
El Paso Telephone Company	98.9%	92.3%	80.7%	53.7%	98.3%	0.0%
Flat Rock Telephone Cooperate, Inc.	100.0%	40.9%	97.6%	11.3%	100.0%	0.0%
Citizens Telephone Company of Illinois	99.3%	72.4%	80.5%	46.9%	98.6%	0.3%
Frontier Communications of Depue, Inc.	100.0%	55.0%	95.2%	16.4%	100.0%	0.0%
Frontier Communications of Illinois, Inc.	100.0%	63.6%	90.0%	49.7%	98.6%	0.0%
Frontier Communications of Lakeside, Inc.	100.0%	91.7%	43.0%	0.0%	100.0%	0.0%
Frontier Communications - Midland, Inc.	97.6%	57.6%	65.4%	17.5%	89.0%	0.0%
Frontier Communications of Mt. Pulaski, Inc.	100.0%	29.6%	92.5%	25.4%	100.0%	0.0%
Frontier Communications of Orion, Inc.	100.0%	97.8%	86.7%	72.7%	100.0%	0.0%
Frontier Communications - Prairie, Inc.	100.0%	97.9%	81.5%	50.4%	100.0%	0.0%
Frontier Communications - Schuyler, Inc.	98.2%	83.8%	65.0%	54.8%	98.2%	0.0%
Frontier Communications of the Carolinas Inc.	99.8%	88.5%	49.9%	57.4%	99.7%	0.0%
Frontier North	99.7%	915%	74.6%	70.5%	99.6%	3.8%
Frontier North (Contel)	99.9%	94.8%	67.6%	65.8%	99.9%	0.1%
Gallatin River Communications	99.9%	96.6%	95.3%	72.7%	99.8%	0.2%
Geneseo Telephone Company	100.0%	99.1%	91.6%	82.2%	100.0%	0.0%
Glasford Telephone Company	100.0%	98.6%	95.4%	57.3%	100.0%	0.0%
Grafton Telephone Company	92.6%	91.2%	75.9%	0.0%	74.7%	5.0%

Table 14: Broadband Deployment in ILEC Service Areas (Continued)

(Data as of December 31, 2011)

ILEC Service Area	% of Population with Access to Download Speeds > 0.769 Mbps and Upload Speeds > 0.2 Mbps	% of Population with Access to Download Speeds > 3 Mbps and Upload Speeds > 0.768 Mbps	% of Population with Access to DSL Broadband ¹	% of Population with Access to Cable Modem Broadband ¹	% of Population with Access to Wireless Broadband ¹	% of Population with Access to Fiber Broadband ¹
Nationwide	99.6%	96.7%	88.9%	85.2%	98.7%	17.8%
Statewide	99.9%	97.8%	89.0%	75.6%	99.8%	0.6%
Grandview Mutual Telephone Company	100.0%	57.0%	5.0%	0.0%	100.0%	0.0%
Gridley Telephone Company	100.0%	100.0%	99.2%	7.6%	100.0%	0.0%
Hamilton County Telephone Cooperative	99.9%	65.7%	93.7%	6.7%	95.2%	0.0%
Harrisonville Telephone Company	100.0%	99.7%	97.7%	68.8%	99.0%	11.2%
Henry County Telephone Company	100.0%	94.8%	88.3%	64.4%	100.0%	0.0%
Home Telephone Company	100.0%	100.0%	13.0%	65.0%	100.0%	86.5%
Illinois Bell Telephone Company	100.0%	99.7%	92.0%	78.2%	100.0%	0.1%
Illinois Consolidated Telephone Company	100.0%	93.6%	89.9%	68.7%	99.9%	0.0%
Kinsman Mutual Telephone Company	100.0%	92.6%	5.4%	0.0%	100.0%	0.0%
La Harpe Telephone Company	99.5%	95.6%	95.2%	58.5%	98.9%	0.0%
Leaf River Telephone Company	100.0%	87.6%	83.7%	20.0%	100.0%	0.0%
Leonore Mutual Telephone Company	100.0%	81.9%	100.0%	0.0%	100.0%	0.0%
Madison Telephone Company	100.0%	100.0%	99.3%	97.0%	98.4%	0.0%
Marseilles Telephone Company	100.0%	92.6%	2.5%	79.5%	100.0%	0.0%
McDonough Telephone Cooperative	99.9%	95.2%	95.5%	29.0%	99.1%	30.3%
McNabb Telephone Company	100.0%	25.6%	100%	0.0%	91.3%	0.0%
Metamora Telephone Company	100.0%	99.4%	90.0%	78.4%	100.0%	0.0%
Mid Century Telephone Cooperative, Inc.	100.0%	39.9%	88.2%	26.5%	99.7%	0.7%
Montrose Mutual Telephone Company	100.0%	93.1%	89.3%	0.0%	99.3%	0.0%
Moultrie Independent Telephone Company	100.0%	100.0%	99.9%	0.0%	100.0%	0.0%
New Windsor Telephone Company	100.0%	10.4%	98.0%	0.6%	100.0%	97.4%
Odin Telephone Exchange	100.0%	77.3%	67.3%	44.3%	99.8%	0.5%
Oneida Telephone Exchange	100.0%	99.0%	99.0%	0.0%	100.0%	94.9%
Reynolds Telephone Company	99.2%	80.3%	92.0%	47.8%	98.1%	0.0%
Shawnee Telephone Company	86.6%	64.6%	47.5%	7.5%	66.0%	38.3%
Stelle Telephone Company	100.0%	52.1%	46.0%	1.2%	100.0%	0.0%
Tonica Telephone Company	97.7%	82.2%	95.0%	66.3%	94.1%	0.0%
Viola Home Telephone Company	100.0%	62.7%	92.2%	62.7%	100.0%	6.2%
Wabash Telephone Cooperative, Inc.	97.6%	59.8%	33.1%	10.3%	97.2%	0.0%
Woodhull Telephone Company	100.0%	99.1%	98.8%	13.8%	100.0%	4.3%

¹ To be defined as broadband, speeds must meet: Download Speeds > 0.769 Mbps and Upload Speeds > 0.2 Mbps

² The information in this table reflects only the information for those providers that provided information to PCI. To the extent that providers failed to report to PCI, the numbers will understate availability.

In addition to summary broadband information, the PCI website contains broadband service provider information down to the household level. PCI's website allows Illinois residents to input their address information and obtain lists of broadband providers that report providing service in the resident's area and

contact information for these providers. The current results of PCI's efforts are available at <http://www.broadbandillinois.org/maps/index.html>.

D. Illinois Broadband Projects (Federal and State Support)

The American Recovery and Reinvestment Act ("ARRA") provided the NTIA and the U.S. Department of Agriculture's Rural Utilities Service ("RUS") with \$7.2 billion to expand access to broadband services in the United States. Several projects in Illinois were awarded grants and/or loans to support the deployment of broadband infrastructure, enhance and expand public computer centers, and encourage sustainable adoption of broadband service. In many instances, the State of Illinois, through the Department of Commerce and Economic Opportunity (DCEO) offered additional support for these Illinois projects. Excluding nationwide grants and/or loans without an Illinois specific allocation, Illinois was awarded approximately \$240 million in ARRA broadband funding. A summary of these projects is listed below.³⁵

Infrastructure Projects

Board of Trustees of the University of Illinois

Federal Award \$22,534,776

State Award \$3,500,000

The Urbana-Champaign Big Broadband project plans to construct 187 miles of fiber-optic broadband network to provide high-speed connectivity to area community anchor institutions and support fiber-to-the-home services in four low-income neighborhoods. Known as a leader in computer networking technology, the University of Illinois plans to bring its experience to bear as it works to close the digital divide in Urbana-Champaign. The project will directly connect 143 anchor institutions, including 40 K-12 schools, 17 social service agencies, 14 healthcare facilities, nine youth centers, four public library systems, and two higher education institutions. A majority of these institutions expect to receive their first high-speed Internet connection via this project. The project proposes to create a fiber-to-the-home pilot project for 2,500 low-income households to purchase an affordable high-speed Internet service plan from commercial providers. In addition, the project expects to spur affordable broadband Internet access for local consumers, including up to 50,000 households and 3,700 businesses, by enabling local Internet service providers to connect to the project's open network.

³⁵ The project descriptions below are from National Telecommunications and Information Administration, U.S. Department of Commerce site <http://www2.ntia.doc.gov/illinois> and United States Department of Agriculture, Broadband Initiatives Program | Awards Report, "Advancing Broadband - A Foundation for Strong Rural Communities", released January, 2011.

DeKalb County Government

Federal Grant \$11,864,164

State Grant \$1,305,000

The DeKalb Advancement of Technology Authority (DATA) Broadband project, a partnership between the DeKalb County Government, Northern Illinois University, and DeKalb Fiber Optic, plans to deploy a 130-mile fiber-optic network across DeKalb County and northern LaSalle County. The project is targeted to reach areas with a demonstrated need for high-speed, low-cost broadband access. The project expects to provide high-speed Internet connections between 10 Mbps to 10 Gbps to at least 60 anchor institutions, such as schools, hospitals, libraries, public safety entities, and numerous government agencies. The project will also enable broadband providers to interconnect with these facilities to provide broadband to households and businesses in unserved and underserved communities. The project design includes five networks overlaid on the fiber optic system— each network will be designed to meet the needs of a specific community: education and libraries, healthcare, the farming community, government and emergency services, and business and economic development.

Delta Communications, dba Clearwave Communications

Federal Grant \$31,515,253

State Grant \$11,351,250

Delta Communications plans to deploy a high-speed fiber middle mile network across a 23-county region of southern Illinois to address the lack of adequate broadband access for community anchor institutions in many of the region's rural, economically distressed communities. The project plans to double Delta's network size by constructing 740 new miles of fiber in the proposed service area. The project will directly connect 232 community anchor institutions with speeds between 10 Mbps and 1 Gbps, including 111 K-12 public schools, 28 public safety entities, 23 libraries, nine community colleges, Southern Illinois University, and 60 healthcare facilities. The network plans to offer points of interconnection for last-mile providers in all 31 communities in the proposed service area.

Illinois Department of Central Management Services

Federal Grant \$61,895,282

State Grant \$30,000,000

The Illinois Department of Central Management Services plans to deploy a high-speed fiber middle mile network across a 55-county region of northeastern, central, and eastern Illinois to address a lack of suitable broadband access for community anchor institutions in many of the region's rural, economically distressed counties. The Illinois Broadband Opportunity Partnership project plans to construct more than 1,000 miles of new fiber while upgrading just over 1,000 miles of the state's existing education network, Illinois Century Network (ICN),

which provides a gateway to advanced online applications for K-12 schools, libraries, and non-research higher education institutions. The project also proposes to interconnect with two round one BTOP awardees: DeKalb county's DeKalb Advancement of Technology Authority Broadband project and University of Illinois Board of Trustees' Urbana-Champaign Big Broadband project.

Northern Illinois University
Federal Grant \$46,114,026
State Grant \$14,000,000

Many community anchor institutions like libraries, K-12 schools, and community colleges in northwestern Illinois face limited broadband capacity, speeds, and service offerings, inhibiting the ability to serve their communities. To address this situation, Northern Illinois University is proposing to deploy an 870-mile network across a nine-county region including Jo Daviess, Stephenson, Winnebago, Boone, Carroll, Lee, Whiteside, Ogle, and LaSalle, significantly leveraging broadband technology for improvements in rural education, economic opportunities, and public safety.

University Corporation for Advanced Internet Development
Federal Grant \$1,525,370 (Illinois Portion)

As part of a longstanding project to connect essential community anchor institutions across the country, and facilitate closer collaboration and long-term benefits for education, research, healthcare, public safety, and government services, the University Corporation for Advanced Internet Development (UCAID) proposes a comprehensive 50-state network benefitting approximately 121,000 community anchors. The project proposes a large-scale, public-private partnership to interconnect more than 30 existing research and education networks, creating a dedicated 100-200 Gbps nationwide fiber backbone with 3.2 terabits per second (TBps) total capacity that would enable advanced networking features such as IPv6 and video multicasting. The project plans to connect community anchors across all disciplines into virtual communities with shared goals and objectives, including colleges, universities, libraries, major veterans and other health care facilities, and public safety entities, with additional benefits to tribes, vulnerable populations, and government entities.

Wireless/Last Mile Projects

Cellular Properties, Inc. - Eastern Illinois Broadband Deployment
Federal Loan \$6,132,260
Federal Grant \$6,132,260
State Grant \$1,000,000

Cellular Properties, Inc. (CPI) will upgrade an existing wireless network to 3G wireless to provide mobile and fixed wireless broadband to extremely rural and predominantly underserved areas of east central Illinois. The project will deploy FTTT where economically feasible to provide an eventual migration path to 4G/LTE. Initially, the 3G network will offer speeds of 7.2 Mbps downstream and 3.6 Mbps upstream. The three PFSAs (proposed funded service areas) are 99 percent rural and cover 11 counties and 36 communities. The communities include 26,605 households, 7,123 businesses, and 704 anchor institutions. CPI will upgrade to a 3G network through an overlay on existing cell sites, coupled with a build of new cell sites. The PFSAs constitute 48 of the 100 towers CPI plans to construct or upgrade to a 3G universal mobile telecommunications system.

Convergence Technologies, Inc. - CTI Rural Open Access WiMAX Network

Federal Loan \$1,434,375
Federal Grant \$4,303,125
State Grant \$700,000

Convergence Technologies, Inc. will offer last-mile wireless broadband and VoIP in Cook, Kankakee, and Will counties in Illinois and Lake, Newton, and Porter counties in Indiana. The project will utilize WiMAX technology as a platform to deliver broadband service speeds of up to 11 Mbps. The network will make services available to 43,755 households, 9,497 businesses, and 3 anchor institutions.

Norlight, Inc. - Illinois VDB Network Expansion Last Mile

Federal Loan \$3,311,324
Federal Grant \$7,726,423
State Grant \$450,000

Norlight, Inc. will implement the Illinois VDB (Virtual Dynamic Backbone) Network Expansion project to provide a wireless network to 13 unserved and underserved areas in central Illinois. This fixed wireless deployment will consist of a network of 72 towers providing highspeed broadband of greater than 5 Mbps. Counties covered include all or parts of Bond, Calhoun, Cass, Christian, Fayette, Greene, Jersey, Macoupin, Montgomery, Morgan, Pike, Scott, and Shelby. The network will make services available to 75,253 households, 9,737 businesses, and 804 anchor institutions.

Shawnee Telephone Company - Shawnee's FTTH Project: Focused Economic Revitalization and Sustainable Transformation of Southern Illinois

Federal Loan \$6,249,989
Federal Grant \$1,102,940

State Grant \$1,000,000

Shawnee Telephone Company will deploy an FTTH network capable of 1 Gbps broadband service speeds in PFSA's that rank among the lowest in per household income and the highest in unemployment in southern Illinois. The network will make services available to 1,209 households, 438 businesses, and 35 anchor institutions.

Utopian Wireless Corporation - Utopian Bushnell WiMAX Project

Federal Loan \$66,091

Federal Grant \$198,271

Utopian Wireless Corporation will provide 4G wireless broadband service to underserved communities near Bushnell. The PFSA is rural and covers approximately 1,481 households, 102 businesses, and 32 anchor institutions. Utopian will deploy a broadband wireless system that features Motorola Mobile WiMAX technology for efficient air interface optimized for IP, built-in support for advanced antenna technologies like MIMO, and quality-of-service controls that enable differentiated services and open access. The system includes WiMAX access points, wireless and wired backhaul, ASN-GW, CSN, and an IP core that supports authentication and traffic routing to application servers and the Internet. Utopian will offer tiered services with average minimum downlink speeds of at least 1.8 Mbps.

Utopian Wireless Corporation - Utopian Cairo WiMAX Project

Federal Loan \$68,686

Federal Grant \$206,055

The Utopian Cairo WiMAX project will make available advanced 4G wireless broadband service to underserved communities in and around Cairo. The PFSA includes the 62914 ZIP code area in Alexander County, where Cairo is the county seat. The PFSA is rural and covers approximately 1,746 households, 87 businesses, and 43 anchor institutions. Using licensed 2.5 GHz spectrum, Utopian will deploy a broadband wireless system that features Motorola Mobile WiMAX technology, which offers several advantages over other wireless technologies, including a highly efficient air interface optimized for IP, built-in support for advanced antenna technologies like MIMO, and quality-of-service controls that enable differentiated services and open access.

Utopian Wireless Corporation - Utopian Flora WiMAX Project

Federal Loan \$129,714

Federal Grant \$389,141

Utopian Wireless Corporation will provide 4G wireless broadband service to underserved communities near Flora. The rural PFSA covers approximately 2,791 households, 276 businesses, and 86 anchor institutions. Utopian will deploy a broadband wireless system that features Motorola Mobile WiMAX technology for efficient air interface optimized for IP, built-in support for advanced antenna technologies like MIMO, and quality-of-service controls that enable differentiated services and open access. The system includes WiMAX access points, wireless and wired backhaul, ASN-GW, CSN, and an IP core that supports traffic authentication and routing to application servers and the Internet. Utopian will offer tiered services with average minimum downlink speeds of at least 1.8 Mbps. Utopian will hire full-time local staff in the PFSA, including up to three sales people to prepare for launch.

Utopian Wireless Corporation - Utopian Monmouth WiMAX Project

Federal Loan \$150,063

Federal Grant \$450,189

The Utopian Monmouth WiMAX project will make available advanced 4G wireless broadband service to underserved communities in the Monmouth area. The PFSA includes the 61462 ZIP code area in Warren County, where Monmouth is the county seat. The PFSA covers 4,419 households, 290 businesses, and 95 anchor institutions. Using licensed 2.5 GHz spectrum, Utopian Wireless Corporation will deploy a broadband wireless system that features Motorola Mobile WiMAX technology. The average minimum downlink speeds for Utopian Wireless subscribers will be at least 1.8 Mbps.

Utopian Wireless Corporation - Utopian White Hall WiMAX Project

Federal Loan \$63,594

Federal Grant \$190,780

The Utopian White Hall WiMAX project will make available advanced 4G wireless broadband service to underserved communities in and around White Hall. The PFSA includes the 62092 ZIP code area in Greene County. The PFSA is rural and covers 1,224 households, 147 businesses, and 36 anchor institutions. Utilizing licensed 2.5 GHz spectrum, Utopian will deploy a broadband wireless system that features Motorola Mobile WiMAX technology. WiMAX offers a number of advantages over other wireless technologies, including a highly efficient air interface optimized for IP, built-in support for advanced antenna technologies like MIMO, and quality-of-service controls that enable differentiated services and open access.

Sustainable Adoption Projects

City of Chicago

Federal Grant \$7,074,369

State Grant \$677,476

The SmartChicago Sustainable Broadband Adoption program intends to spur economic development in five disadvantaged neighborhoods in Chicago with a comprehensive broadband awareness and adoption program that will include providing computers and training opportunities to more than 11,000 residents and 500 small businesses and not-for-profits. The project intends to create public computer centers at six community centers for working families and expand workstation capacity at four Business Resource Centers, as well as provide 1,500 residents and small businesses who complete a multi-session training course with laptops and netbooks. SmartChicago plans to conduct a citywide multilingual broadband awareness campaign that will reach an estimated 200,000 residents, including ads on radio, TV, print, and city buses; outreach by local community organizations in each neighborhood; and the creation of neighborhood-based Web portals.

Communication Service for the Deaf, Inc.

Federal Grant \$468,396 (Illinois Portion)

Broadband's ability to expand educational and employment opportunities is especially meaningful for Americans who are deaf or hard of hearing, a community that faces unique challenges in education and that suffers from a rate of unemployment much higher than the national average. Communication Service for the Deaf, Inc. (CSD) intends to expand broadband adoption among people who are deaf and hard of hearing and provide them with online tools to more fully participate in the digital economy. The project proposes to employ a combination of discounted broadband service and specialized computers, technology training from an online state-of-the art support center customized to the community's needs, public access to videophones at anchor institutions from coast to coast, and a nationwide outreach initiative. Thousands will gain online access to all the Internet has to offer, including sign language interpreters, captioned video services, and other content and functionalities designed especially to advance their educational, employment, and healthcare interests.

MyWay Village, Inc.

Federal Grant \$4,731,442

State Grant \$1,206,550

According to a recent survey, fewer than one in twenty residents in low-income elder-care facilities in northern Illinois, use broadband services despite the demonstrated appeal for staying in touch with distant family, accessing social

and government services, and improving quality of life. MyWay Village, in partnership with the Illinois Department of Commerce and Economic Opportunity and the Illinois Low Income Senior Internet Coalition, plans to transform its Connected Living Adoption and Sustainability Program, a longstanding program that ties technology, training, and technical support together in a way uniquely tailored for the senior community. Through both traditional and grassroots awareness efforts, the project plans to engage its 23 targeted senior housing communities to teach the basics of e-mail, Web access, and other practical broadband applications. The project also intends to collaborate with local Workforce Investment Act organizations to help seniors who develop their digital literacy skills to find part time work.

One Economy Corporation

Federal Grant \$2,857,992 (Illinois Portion)

The 21st Century Information and Support Ecosystem project proposes to implement a comprehensive program of computer training, wireless Internet access, broadband awareness marketing, and online content and applications to residents of 159 affordable and public housing developments and low-income communities in 50 cities and towns across 31 states and the District of Columbia. The project plans to implement four principal programs: training 2,500 youth to become “Digital Connectors” who will then provide digital literacy training to others in their communities; deploying localized broadband networks in public housing developments; developing online content and applications aimed at low-income, low-literacy audiences.

Public Computer Center Projects

City of Chicago

Federal Grant \$8,974,283

State Grant \$1,573,812

According to a 2009 study commissioned by the City of Chicago, as many as 40 percent of city residents lack home broadband access, making libraries and other public computer centers essential resources for employment, training, and educational opportunities. Over 60 percent of Chicago libraries now report average wait times for a computer of three hours or longer. The SmartChicago Public Computer Centers project proposes a wide-scale upgrade and expansion of workstation capacity at more than 150 locations, including city libraries, community colleges, public housing sites, workforce centers, senior centers, after-school programs, and other community locations throughout Chicago. The project will provide hundreds of thousands of hours of training, including digital literacy instruction and assistance for job seekers. The project plans a specific focus on low-income residents, at-risk youth, senior citizens, people with disabilities, and the unemployed.

Satellite Grant Program

Hughes Network Systems and WildBlue Communications
Federal Grant \$100,000,000 (Nationwide)

The Satellite Grant Program made \$100 million available through four broadband satellite providers (EchoStar XI and Spacenet, Inc. were included in the above grant program, but provided funding to serve regions that do not include Illinois) to connect rural premises left unserved by other technologies. These broadband satellite providers are expected to reach nearly 424,000 premises and 10,000 commercial subscribers across the country. Through this funding, these subscribers will receive broadband satellite premises equipment, installation, and activation at no cost to them, as well as discounted service for at least 1 year.

Additional information on several of these projects can be found at <http://www.broadbandillinois.org/Projects.html>.

IV. CONCLUSION

This report summarizes the market shares of ILECs and CLECs in Illinois local telephone markets. While many other factors affect actual market competitiveness, market share information is a useful starting point for analyzing the status of market competition.³⁶

According to the market share information reported here, the CLEC overall wireline telephone market share increased between year-end 2010 and year-end 2011. At the same time, total reported wireline telephone lines in Illinois declined between year-end 2010 and year-end 2011 (as has occurred each year since year-end 2001). Economic conditions in Illinois, and the fact that consumers are relying on broadband services to obtain high-speed Internet access may explain, in part, the reported reductions. Some portion of the reduction in wireline telephone lines undoubtedly is attributable to the fact that substitutes for wireline telephone services are not reported as CLEC wireline telephone lines to the Commission. Many consumers are substituting mobile wireless phone service or unreported voice-over-internet-protocol ("VoIP") service for wireline telephone service. The more consumers turn to such alternatives to wireline telephone services, the less accurate an examination based solely on CLEC wireline

³⁶ "Other things being equal, market share affects the extent to which participants or the collaboration must restrict their own output in order to achieve anticompetitive effects in a relevant market. The smaller the percentage of total supply that a firm controls, the more severely it must restrict its own output in order to produce a given price increase, and the less likely it is that an output restriction will be profitable." Antitrust Guidelines for Collaborations Among Competitors, Issued by Federal Trade Commission and the U.S. Department of Justice, April 2000, Section 3.3.3.

telephone market shares will be as a gauge of competition in local telephone markets. For, this reason, the information contained in this report must be interpreted with caution.

Even given such limitations, the market share data and other information presented in this report reveal and confirm several broad trends in competitive conditions in Illinois telephone markets. CLECs continue to increase reliance upon their own network facilities, rather than utilizing network facilities of the historic incumbent local exchange carriers. Cable television companies continue to adapt their video networks to successfully enter into Illinois telephony and broadband markets. The last few years also has witnessed several business alliances between cable television providers and traditional voice telephone providers, aimed at facilitating entry into local telecommunications markets across the state. And the available data are consistent with observations that local telephone competition generally is increasingly focused on offering bundled packages of voice telephone, high speed data and video services.

Recommendations for Legislative Action

The Commission has no specific recommendations for legislative action to accompany this report. The Commission notes that the Universal Telephone Protection Law of 1985 (Article XIII of the PUA or 220 ILCS 5/13) is scheduled to be repealed on July 1, 2013. The Universal Telephone Protection Law of 1985 comprises the main body of Illinois law prescribing the form and manner of regulation of the telecommunications industry in Illinois. It addresses everything from the regulation of basic telecommunications services to telephone subsidy programs (e.g., the subsidy program that provides support for persons with hearing or speech disabilities). The Commission anticipates legislative initiatives to extend the effective dates of this section of the PUA, as well as to repeal and/or amend sections that may no longer be in the public interest due to the reasonable availability of competitive telecommunications services.

APPENDIX A: Illinois LATA Geography and Demographics

Local Access and Transport Areas (LATAs) are the geographic areas within which Bell Operating Companies (BOCs) were permitted to carry telephone traffic following their divestiture from AT&T. In 1984, BOCs (including Ameritech in Illinois) were prohibited from carrying telephone traffic across LATA boundaries (interLATA traffic), but were allowed to carry telephone traffic, including toll calls, within LATA boundaries (intraLATA traffic). There are 193

domestic LATAs in the United States. Of the 193 domestic U.S. LATAs, 18 are either in whole, or in part, within Illinois.³⁷

There is considerable variation in size and demographic makeup among the Illinois LATAs.³⁸ Table 6 (above) lists size and demographic data for each of the 14 LATAs for which information is presented in this report. Table 6 illustrates that the average LATA in Illinois is approximately 4,100 square miles. The largest LATA in terms of area is the Chicago LATA with approximately 8,500 square miles. The smallest is the portion of the Davenport, Iowa LATA located in Illinois, which encompasses approximately 2,100 square miles.

The Chicago LATA is the most populous LATA in Illinois with over 8.7 million residents, well above the average LATA size of approximately 920,000 residents. The Chicago LATA also contains the greatest number of households, with approximately 3.2 million. In contrast the Macomb, Illinois LATA contains less than 130,000 residents and just over 52,000 households. The Chicago and Olney, Illinois LATAs, respectively, contain the highest and lowest population per square mile. There are nearly 1,000 residents per square mile in the Chicago LATA and less than 32 residents per square mile in the Olney LATA. These two LATAs also contain the highest and lowest number of households per square mile, with 367 households per square mile in the Chicago LATA and 13 households per square mile in the Olney LATA.

Of the 18 LATAs in Illinois, 4 are predominately outside of Illinois and contain very few customers located within Illinois. For this report, information applicable to the pieces of these four LATAs will be included with information for LATAs that are predominately in Illinois or contain a significant number of Illinois customers. For example, very few Illinois residents or businesses are located within the Terre Haute, Indiana LATA. The information reported for Illinois residents and businesses in the Terre Haute, Indiana LATA is, therefore, included in information reported for the Champaign, Illinois LATA. There are a significant number of Illinois residents and businesses located within the St Louis, Missouri LATA. Therefore, information for Illinois residents and businesses in the St Louis, Missouri LATA is reported separately from other Illinois LATAs. All information reported is for those customers located in Illinois. For example, no information is reported for customers located in the Missouri

³⁷ Although LATA boundaries were created in order to delineate the geographical area within which BOCs could offer long distance services, other "LATA" boundaries have been created in order to segment non-BOC service territories. The LATA geography adopted here follows Telcordia Technologies, Inc. ("Telcordia" f/k/a Bellcore) conventions as delineated in the local exchange routing guide ("LERG").

³⁸ The LATA size and demographic information contained in this table is derived from U.S. Census 2010 obtained from U.S. Department of Commerce, Census Bureau Web Cite at <http://www.census.gov/>. To obtain estimates of area and demographic information, Staff aggregated census block group information up to the LATA level, assigning each census block group uniquely to the LATA containing the centroid of the census block group.

portions of the St Louis, Missouri LATA. Figure A-1 depicts the 18 LATAs for which information is reported in this report.

Figure A1: Local Access and Transport Areas ("LATAs") and Rate Exchange Area Boundaries in the State of Illinois

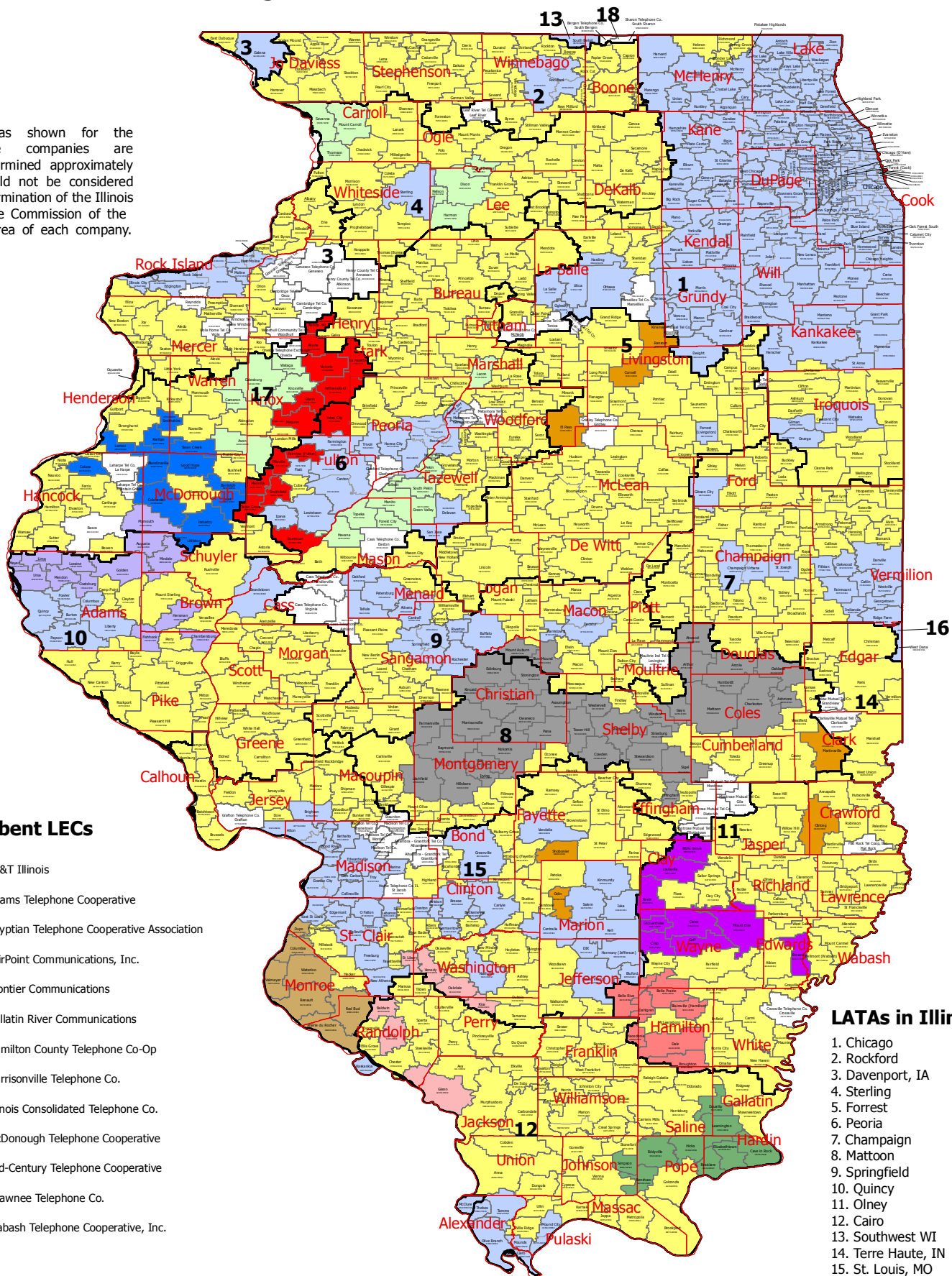
The areas shown for the respective companies are only determined approximately and should not be considered as a determination of the Illinois Commerce Commission of the service area of each company.

Incumbent LECs

- AT&T Illinois
- Adams Telephone Cooperative
- Egyptian Telephone Cooperative Association
- FairPoint Communications, Inc.
- Frontier Communications
- Gallatin River Communications
- Hamilton County Telephone Co-Op
- Harrisonville Telephone Co.
- Illinois Consolidated Telephone Co.
- McDonough Telephone Cooperative
- Mid-Century Telephone Cooperative
- Shawnee Telephone Co.
- Wabash Telephone Cooperative, Inc.

LATAs in Illinois

1. Chicago
2. Rockford
3. Davenport, IA
4. Sterling
5. Forrest
6. Peoria
7. Champaign
8. Mattoon
9. Springfield
10. Quincy
11. Olney
12. Cairo
13. Southwest WI
14. Terre Haute, IN
15. St. Louis, MO
16. Indianapolis, IN
17. Macomb
18. Southeast WI



APPENDIX B: Wireline Telephone Provisioning Detail

Table B1 – B4 contain detail wireline telephone provisioning information for the 14 Illinois LATAs examined in this report. Table B1 contains wireline telephone lines in each LATA provided by ILECs, CLECs and all LECs combined. Tables B2 and B3 contain similar information regarding, respectively, residential and business wireline telephone line provisioning. Table B4 reports estimated unreported residential retail E-911 lines by LATA.

**Table B1 - Retail Wireline Telephone Provision by LATA
(December 31, 2011)**

LATA	LATA Name	All LECs	All LEC Lines	ILECs	ILEC Lines	CLECs	CLEC Lines	CLEC Lines as % of Total
358	CHICAGO ILLINOIS	62	4,115,394	7	2,668,261	55	1,447,133	35.2%
360	ROCKFORD ILLINOIS ¹	38	158,502	4	96,574	34	61,928	39.1%
362	CAIRO ILLINOIS	27	95,580	4	82,264	23	13,316	13.9%
364	STERLING ILLINOIS	30	78,165	4	58,943	26	19,222	24.6%
366	FORREST ILLINOIS	24	98,360	4	75,066	20	23,294	23.7%
368	PEORIA ILLINOIS	37	177,078	7	131,099	30	45,979	26.0%
370	CHAMPAIGN ILLINOIS ²	32	133,067	2	103,950	30	29,117	21.9%
374	SPRINGFIELD ILLINOIS	36	166,627	5	129,214	31	37,413	22.5%
376	QUINCY ILLINOIS	26	55,686	3	49,013	23	6,673	12.0%
520	ST LOUIS MISSOURI	46	293,570	9	223,882	37	69,688	23.7%
634	DAVENPORT IOWA	35	94,435	9	73,576	26	20,859	22.1%
976	MATTOON ILLINOIS	16	85,094	4	76,659	12	8,435	9.9%
977	MACOMB ILLINOIS	20	45,439	7	39,799	13	5,640	12.4%
978	OLNEY ILLINOIS	20	48,941	6	43,915	14	5,026	10.3%
Statewide		117	5,645,938	41	3,852,215	76	1,793,723	31.8%

¹ Includes information for those portions of the SE and SW Wisconsin LATAs located in Illinois.

² Includes information for those portions of the Indianapolis Indiana and Terre Haute Indiana LATAs located in Illinois.

**Table B2 - Residential Retail Wireline Telephone Provision by LATA
(December 31, 2011)**

LATA	LATA Name	All LECs	All LEC Lines	ILECs	ILEC Lines	CLECs	CLEC Lines	CLEC Lines as % of Total
358	CHICAGO ILLINOIS	33	2,100,304	7	1,347,004	26	753,300	35.9%
360	ROCKFORD ILLINOIS ¹	18	95,674	4	56,115	14	39,559	41.3%
362	CAIRO ILLINOIS	16	58,683	4	50,767	12	7,916	13.5%
364	STERLING ILLINOIS	14	49,157	4	34,448	10	14,709	29.9%
366	FORREST ILLINOIS	9	57,092	4	40,819	5	16,273	28.5%
368	PEORIA ILLINOIS	19	107,419	7	76,638	12	30,781	28.7%
370	CHAMPAIGN ILLINOIS ²	14	67,725	2	49,330	12	18,395	27.2%
374	SPRINGFIELD ILLINOIS	18	83,720	5	59,446	13	24,274	29.0%
376	QUINCY ILLINOIS	14	33,859	3	31,152	11	2,707	8.0%
520	ST LOUIS MISSOURI	27	194,969	9	146,218	18	48,751	25.0%
634	DAVENPORT IOWA	20	55,951	9	42,362	11	13,589	24.3%
976	MATTOON ILLINOIS	8	52,693	4	45,468	4	7,225	13.7%
977	MACOMB ILLINOIS	10	30,679	7	25,917	3	4,762	15.5%
978	OLNEY ILLINOIS	10	33,757	6	30,268	4	3,489	10.3%
Statewide		86	3,021,682	41	2,035,952	45	985,730	32.6%

¹ Includes information for those portions of the SE and SW Wisconsin LATAs located in Illinois.

² Includes information for those portions of the Indianapolis Indiana and Terre Haute Indiana LATAs located in Illinois.

**Table B3 - Business Retail Wireline Telephone Provision by LATA
(December 31, 2011)**

LATA	LATA Name	All LECs	All LEC Lines	ILECs	ILEC Lines	CLECs	CLEC Lines	CLEC Lines as % of Total
358	CHICAGO ILLINOIS	56	2,015,090	7	1,321,257	49	693,833	34.4%
360	ROCKFORD ILLINOIS ¹	36	62,828	4	40,459	32	22,369	35.6%
362	CAIRO ILLINOIS	21	36,897	4	31,497	17	5,400	14.6%
364	STERLING ILLINOIS	26	29,008	4	24,495	22	4,513	15.6%
366	FORREST ILLINOIS	21	41,268	4	34,247	17	7,021	17.0%
368	PEORIA ILLINOIS	34	69,659	7	54,461	27	15,198	21.8%
370	CHAMPAIGN ILLINOIS ²	27	65,342	2	54,620	25	10,722	16.4%
374	SPRINGFIELD ILLINOIS	34	82,907	5	69,768	29	13,139	15.8%
376	QUINCY ILLINOIS	23	21,827	3	17,861	20	3,966	18.2%
520	ST LOUIS MISSOURI	40	98,601	9	77,664	31	20,937	21.2%
634	DAVENPORT IOWA	33	38,484	9	31,214	24	7,270	18.9%
976	MATTOON ILLINOIS	16	32,401	4	31,191	12	1,210	3.7%
977	MACOMB ILLINOIS	19	14,760	7	13,882	12	878	5.9%
978	OLNEY ILLINOIS	19	15,184	6	13,647	13	1,537	10.1%
Statewide		110	2,624,256	41	1,816,263	69	807,993	30.8%

¹ Includes information for those portions of the SE and SW Wisconsin LATAs located in Illinois.

² Includes information for those portions of the Indianapolis Indiana and Terre Haute Indiana LATAs located in Illinois.

Table B4 –Residential Retail Reported Lines and E-911 Listing by LATA

LATA	LATA Name	Reported Residential Retail Wireline Telephone Lines as of 12/31/11	Residential Retail E-911 Listings as of 12/31/11	Estimated Residential Retail E-911 Listings not Reported as Wireline Telephone Lines as of 12/31/11	Reported Residential Retail Wireline Telephone Lines Plus Estimated Unreported E-911 Listings as of 12/31/11	Reported Residential Retail Wireline Telephone Lines as of 12/31/01
358	CHICAGO ILLINOIS	2,100,304	2,179,541	79,237	2,179,541	3,645,807
360	ROCKFORD ILLINOIS ¹	95,674	115,731	20,057	115,731	161,890
364	STERLING ILLINOIS	49,157	52,175	3,018	52,175	89,546
368	PEORIA ILLINOIS	107,419	118,309	10,890	118,309	191,519
370	CHAMPAIGN ILLINOIS ²	67,725	90,860	23,135	90,860	135,155
374	SPRINGFIELD ILLINOIS	83,720	98,099	14,379	98,099	151,539
376	QUINCY ILLINOIS	33,859	33,871	12	33,871	63,784
520	ST LOUIS MISSOURI	194,969	224,209	29,240	224,209	313,543
634	DAVENPORT IOWA	55,951	66,711	10,760	66,711	92,784
362	CAIRO ILLINOIS	58,683	72,535	13,852		
366	FORREST ILLINOIS	57,092	64,758	7,666		
976	MATTOON ILLINOIS	52,693	64,562	11,869	266,291*	411,824*
977	MACOMB ILLINOIS	30,679	27,572	0		
978	OLNEY ILLINOIS	33,757	32,466	0		
Statewide		3,021,682	3,241,399	224,115	3,245,797	5,257,391

¹ Includes information for those portions of the SE and SW Wisconsin LATAs located in Illinois.

² Includes information for those portions of the Indianapolis Indiana and Terre Haute Indiana LATAs located in Illinois.

* Combined figures for the Cairo, Forrest, Mattoon, Macomb, and Olney LATAs.

